#10
4/25/03

PATENT LEE-8

UNITED STATES DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

Applicant:
Han-Sen Lee
Serial No: 09/903,315
Filing Date: 7/10/2001
Title:
MODULARIZED HORIZONTAL BLIND SET

GROUP ART UNIT:
3634
EXAMINER:
Bruce Allen Lev
Fax: 703-746-3559

Commissioner of Patents and Trademarks
Washington, D.C. 20231

APPELLANT'S APPEAL BRIEF

(37 C.F.R. 1.192(a))

Sir:

This is an appeal with respect to the final rejection of claims 1-8 in the above-identified patent application. This BRIEF contemplates the Office Action Summary mailed 11/18/2002. Two copies of this BRIEF, in addition to the original, are submitted herewith pursuant to 37 C.F.R. 1.192(a). The appeal brief fee of $160.00 is being submitted pursuant to 37 C.F.R. 1.17(f). However, should any additional fee be required, it is requested that such fee be charged to Deposit Account No. 08-0765.

REAL PARTY IN INTEREST

In the current appeal, the real party in interest is the inventor Han-Sen Lee.

RELATED APPEALS AND INTERFERENCES

Insofar as is known by Attorney for Applicant and Applicant, there are no related interferences or appeals either with respect to the subject matter hereof, nor with respect to the Applicant's hereof.

STATUS OF THE CLAIMS

Currently claims 1-14 are pending and stand rejected under 35 U.S.C. §112 and 102 as the sole bases for rejection. All rejected claims are appealed from.

STATUS OF THE AMENDMENTS

The claims were last amended, as per the date stated on the final rejection, October 8, 2002. The amendments addressed both §112 issues and substantive issues, although it is unclear if the amendments have been acknowledged. The base claim 1 has been restricted, while the base claim 5 has undergone only minor changes as to its commas.

In the final rejection was issued by the PTO on 11/18/02 the effect of the amendments to the §112 rejection were unacknowledged. All amendments have been entered.

CONCISE EXPLANATION OF THE INVENTION

The invention has utility in that it provides a configuration of structures available to an assembler which enables rapid construction of, and customization of, a horizontal blind set.

The invention solves a problem relating to the fact that window opening dimensions and horizontal blind set dimensions almost never match. The invention deals with providing a system to enable a vertical distance match, AND to enable customization of the selection of top rail and slat sets with each other.

It solves the problem of having to accept either a blind set which does not extend all the way down to the bottom of a window opening or which extends too far and bunches over the bottom length of louvers. This is because where a short louver set is provided, it typically cannot be lengthened. Trying to add bits of ladder rope and lengths of vertical draw string is practically impossible. Even where the louver set is provided overly long, a worker must carefully untie or cut the vertical portions of the ladder string surrounding the angular positioning drums and then either remove the height adjustment cords through the channel from the top or remove the height adjustment cords from the bottom by dis-assembling the base louver. Unstringing the assembly will ideally be a slow exacting task where the assembly will be placed in a position to maintain order.

The invention also addresses the issue of material waste. Overly long vertical blind sets are wasteful of time in disassembly and the materials which are continually removed will tend to accumulate to no further use in the installer's shop. As a result, the cost of the overly long blind set will be higher priced. The elements of waste in this system include the wasted manpower at the factory assembling the overly long set, the wasted manpower at the installer's shop spent disassembling the overly long set, and finally the wasted materials from having manufactured a blind set having a length which is significantly longer than the average installation.

Enabling the specification of an upper channel and its control apparatus is also an issue. There are loop string controls for the angle adjustment drum as well as wand type controls. Where an installer uses equal amounts of each type, a given level of inventory will be doubled in order to stock both types. This doubling of inventory will be inventory of, for example, a set of fully complete wand units and a set of fully complete pull string units. Similarly, any other types of units will have their inventory numbers multiplied, not by a relatively inexpensive top channel alone, but by a fully made up blind assembly. Considering further differences, such as style and color, forces an even higher multiplier of inventory "waste" either in terms of inventory which may never be utilizable, or in

foregone investment income which would otherwise be invested elsewhere.

To overcome these problems, the invention illustrates a modularized horizontal blind to provide a configuration which is easily modifiable, reduces inventory costs and waste. The only ultimate waste created from the modularized horizontal blind set is the trimming of ladder and elevation string or cord. A completed bottom section, including base slat, a series of slats inserted into a ladder cord, and a set of elevation cords strung through the slats, with the ladder cord and elevation cords preferably properly tied off to enable a rapid layout and interconnect with a selected channel member. In forming a custom sized assembly, workers can utilize a chart based upon the vertical height of the top channel, and the spacing of the ladder chord. The ability to know in advance the number of louvers needed for a given height will first assure that an optimum length can be selected to insure that the base louver will always be able to extend to the lowest level within the window space, and second, enable a wide variety of different sized louver and ladder sets to be selected for a given size head rail. For example, where the window opening is five feet, and the number of louvers enabling a length just over five feet are addressable by chart indicating the exact number of louvers to include. Further, since different ladder cord has different characteristics, such

as time to relax, etc., the use of this technique eliminates the uncertainty of trying to stretch the ladder cord, and permits an installation which will settle into a more exacting height within 24 - 48 hours after installation. In other words, the characteristics of the materials can be taken to account in providing a chart for each type of material, each weight of material, each size of material and the like.

CONCISE STATEMENT OF ISSUES PRESENTED

Issues of Rejection

1. Whether Claims 1 and 5 were properly rejected under 35 U.S.C. § 112 as lacking grammatical sense.

2. Whether claims 1 - 8 were properly substantively rejected under 35 U.S.C. § 102 as being unpatentable over U.S. Patent No. 6,119,757 as anticipated by Judkins et al.

GROUPING OF CLAIMS

Independent claim 1 is grouped with claims 2, 3, & 4 directly dependent upon it. Independent process claim 5 is grouped with claims 6, 7, & 8 directly dependent upon it. Thus claims 1-4 form a first group and claims 5-8 form a second group. Claims in this first group which do not stand or fall together include:

(1) Claim 2 because the elevation cord bundling holds the assembly together.

(2) Claim 3 because the ladder cord bundling holds the assembly together.

(3) Claim 4 because of the addition of the channel and component assembly to make a completed device.

Claims in this second group which do not stand or fall together include:

(1) Claim 6 because of the step of adding and removing louvers for custom height adjustment where customization is needed.

(2) Claim 7 because of the unbundling the elevation cords step to perform layout and further assembly step.

(3) Claim 8 because of the unbundling the ladder cords step to perform layout and further assembly step.

In summary, the claim groupings are (1) 1 - 4, and (2) 5 - 8. None of the claims fall together.

ARGUMENT

§112 Issues

CLAIMS 1 and 5 REJECTION

This section of rejection deals with both the first and second grouping and was made in the first substantive office

action of 6/26/2002 and repeated verbatim, despite amendment of the claims. The language complained of is "an aperture for fitting within said bore", however the claim reads "a first end plug having an aperture, for fitting within said first bore of said base louver". Thus, it is the plug which fits within, and not the aperture. The plug HAS an aperture, but the plug is the subject of the phrase it is the plug which fits.

At the second half of the §112 rejection, the examiner states "a first vertical elevation cord...affixed adjacent said first and of said first vertical elevation cord", however, the full section of this portion of the claim reads: "a first vertical elevation cord, having a first end and a second end, and extending through each said first elevation cord openings of said plurality of louvers, and said aperture of said first end plug and **affixed adjacent said first end of said first vertical elevation cord to secure said first vertical elevation cord first end from pulling free of said first end plug**. As such, the answer to affixation is included in the claim and it is affixed, whether by some affixing means or by tying it to itself to prevent unraveling.

As a result, it is believed that the §112 rejections have been shown to be withdrawable, or it has been shown that the §112 rejections were inadvertently erroneously maintained in the last office action.

§102 Issues

CLAIMS 1 - 8 REJECTION

The claims, 1-8 were rejected under 35 U.S.C. §102 over U.S. Patent No. 6,119,757 as anticipated by Judkins et al. The *Judkins et al.* reference appears to concentrate on the bottom rail as a string keeping and storage site.

SUMMARY OF ARGUMENTS BY CLAIM GROUPING

In summary, the claim groupings are (1) 1 - 4, & (2) 5 - 8. Each grouping will, in addition, be dealt with separately.

Grouping (1) claims 1 - 4 (apparatus claims).

Judkins et al. attacks the problem encountered when a lower plug in the bottom thicker slat becomes worn with repeated adjustment and insertion (column 2, line 40), as well as the time it takes to pack the cord. The goal is "repeated disconnection and re-connection of the lift cords and ladders (from the bottom rail or thicker bottom slat) without otherwise deteriorating the connections.

Judkins et al. also shows a configuration using outside lift cords which pass outside the rails and next to the ladders. The invention of ***Judkins et al.* relates to the use of the bottom rail** (at column 2, line 67) [which] "...is length adjustable so

that the cord ladders can be shortened to take up slack when the length of the blind is altered and then reconnected afterwards to give the customized blind a finished appearance."

Thus the system being provided and disclosed is a mechanical improvement to the bottom (rail or slat) which has improved cord storing structures. Thus, *Judkins et al.* is fatally different from Applicant's invention in two respects.

First, *Judkins et al.* is concerned with making adjustments in an already-assembled blind set from the most convenient point for an **installed blind set**, the bottom louvers, etc. As a result, *Judkins et al.* does not give the user a chance to mix head rails with horizontal louver sets.

Second, *Judkins et al.* does not teach the provision of the bundled sets which are claimed in the claims of applicant. The very essence of applicant's claim is the provision of a cord and louver assembly.

The fact that conventional horizontal blind sets have the connectivity which is known but which is specially taught by applicant in conjunction with the pre-packaged assembly provided (and which takes advantage of such connectivity utilized by the supplied cord and louver assembly which applicant teaches to provide) is not fatal to the claim.

Third, the Examiner erroneously assumes that since the ultimate connectivity achieved by applicant is the same

connectivity as is the case with horizontal blind sets that Applicant's invention is old. No prior reference has been cited which shows the claimed pre-packaging or provision of elements which applicant makes.

The Examiner states that "here is a blind set where the cords are of greater length" (for packing and storage in a storage base louver) and thus the invention is taught. However, the use of a base storage configuration does not meet the specifics of the claim that the upper ends of the cords are provided with extra length **"as a package" and so that a head rail may be independently chosen and the provided package attached to it**. This structure and step is not shown by *Judkins et al*. The extra length is for threading and attaching into the head rail and its components and the claims specify that it is the first ends of the vertical cord portions which are free and are of excess length. In *Judkins et al*. adjustment is done at the bottom. Storage is performed at the bottom as a way to secure the bottom louver. In *Judkins et al*. there is length adjustment, but not excess length, and NOT:

(1) elevation cord

> "by a length greater than required for connection of said second end of said vertical elevation cord [end opposite the end connected to the base louver] to a

channel and component assembly of a horizontal blind set."

AND (2) vertical cord portions:

"said first ends (opposite the second ends connected to the base louver) of said first and said second ladder cords extending beyond a ladder opening occupied by a louver farthest from said base louver by a length greater than required for connection to a channel and component assembly of a horizontal blind set".

Further:

Thus, the claimed invention not only requires excess length, but is specific as to a required excess length on TWO cord component types and further specifies WHICH ENDS of those components is to have the excess length. (1) elevation cord ends distal to the base louver (2) ladder cord vertical portions distal to the base louver. Given this level of specificity, *Judkins et al.* is simply ineffective as a §102 reference.

Fourth, Claim 1 is drawn to a set which includes ladder cords and left cords and where ends of the lift cords are extended through the apertures in the louvers and attached to the plugs in the base louvers. It is a "ready to go" set for attachment to a head rail of choice.

Fifth, *Judkins et al.* attacks the same old problem in the same old way. The problem is one of adjustment of a **completed**

blind set to a different length window. No mix and match selection of head rail and lower horizontal louver sets are possible. The solution is for *Judkins et al.* to free the bottom rail for removal, slats adjacent to the bottom rail for removal and for cutting to be followed by re-attachment to the bottom rail.

Conclusion (as to apparatus):

The present claimed invention teaches the provision of a bundled, ready-to-go combination of made up slats and bottom rail with a generous length of excess top ladder cord and lift cord which can provide the ability for the user to select a type of head rail system for use with the combination. This is completely opposite to the method of *Judkins et al.* in which the design starts with the head rail and a long series of slats to be selectively shortened from the BOTTOM. *Judkins et al.* in effect cannot be lengthened and does not supply a length of material to enable significant adding of slats for the purpose of fitting to a window opening. But even if this were so, it is not shown to do such within the narrow meaning of the claims.

Further Applicant's device can ALSO be shortened from the bottom if such is necessary later on. Such necessary instances include mis measurement by fractions of an inch, or in situations where a horizontal blind set has been in use for a while and where it is moved to a new window of shorter length. Thus

Applicant ipso facto goes beyond *Judkins et al.* by both showing a utility the same as *Judkins et al.* as well as a utility wholly omitted by *Judkins et al.*

Grouping (2) claims 5 - 8 (process claims).

U.S. Patent No. 6,119,757 to *Judkins et al.* appears to concentrate on the bottom rail as a string keeping and storage site. As such it is concerned with manipulation of the base louver area of the structure of an assembled horizontal blind set.

First process claim 5 initially recites the provision of the apparatus of claim 1, and all of the reasons for allowance set forth for claims 1 - 4 apply to the apparatus provided in the first part of the process claim 5. Further, claim 5 goes on to require the steps of (1) extending said second ends of said first and said second vertical elevation cords through respective first and second small apertures in the base of a channel and component assembly for exiting said channel and component assembly at a location to enable users to pull said first and said second vertical elevation cords to raise and lower said base louver; (2) extending said second ends of said first and a second vertical cord portions of said a pair of ladder cords through respective openings in said channel and component assembly;

(3) attaching said second ends of said first and a second vertical cord portions of said a pair of ladder cords each to a respective rotation member of said channel and component assembly, to form said horizontal blind set.

Thus, this specific manner of (I) starting with the recited structure, and (II) assembling the components as specified by the claims is taught NOWHERE in *Judkins et al*. **Thus it is clear that claim 5, and claims dependent on claim 5 are in condition for allowance.**

In the last action, the Examiner simply assumed that connectivity assumes all steps in achieving such connectivity. However, where the claim is narrowed and where it is required to begin with an assembly of a specified configuration, and where it is followed by process steps which utilize that assembly of a specified configuration, it is again clear that **claim 5, and claims dependent on claim 5 are in condition for allowance.**

Conclusion (as to process):

The prior reference does not even tangentially disclose the claimed inventive process. Therefore claims 5 - 8 are in condition for allowance.

THE CLAIMS AT ISSUE (1-8) ARE LIMITED IN SCOPE

All of the above arguments must be examined in view of the narrow nature of the claims and the non-applicability and lack of

relevant detail in either the prior art reference (singular) cited or substance of the rejection made by the Examiner. It is exactly because no one else has formulated a structure and process like applicant's that the Examiner has had to resort to a weak argument using a reference which in no way anticipates Applicant's claims. If applicant's claims were broad or non-specific, the broad concept of a typical art reference could be applied with a charge of obviousness in enveloping and obviating a broad claim. But since the claims are specific, a corresponding specificity is expected with regard to both the cited art references and the rejecting arguments in order to properly sustain a rejection. In the present instance, the prior art references are incompatible with each other to achieve the Applicant's claimed purpose, as well as the IMPORTANT DETAILS of applicant's claims.

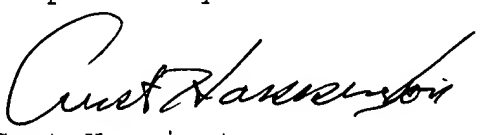
For the SINGLE prior art reference employed, simply too much has been asked of IT in an attempt to prevent Applicant from obtaining a patent on his invention. The Examiner has expressed his opinion regarding the non-patentability of Applicant's claims both in interviews as well as in office actions, but the cited art references are simply not detailed enough, compatible enough or relevant enough to ***fairly*** reject Applicant's detailed claims.

For all of the above reasons, Attorney for applicant submits that the claims at issue in this case, namely 1-8 are in

condition for allowance and patentable over any reasonable treatment of the cited art and bases for rejection. Applicant prays that the Board of Patent Interferences and Appeals makes such a finding and a reversal of the Examiner's final rejection of the claims under §112 and §102.

Dated: April 17, 2003

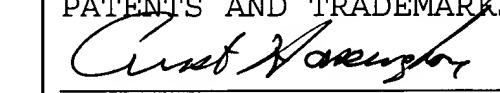
Respectfully submitted:



Curt Harrington
Registration Number 31,456
Suite 250
6300 State University Drive
Long Beach, CA 90815
Tel. (562) 594-9784
Fax:(562) 594-4414

Docket: LEE-8

"EXPRESS MAIL" MAILING LABEL NO.: EV 171 284 351 US
DATE OF DEPOSIT: **April 17, 2003**
I HEREBY CERTIFY THAT THIS PAPER OR FEE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE "EXPRESS MAIL POST OFFICE TO ADDRESSEE" SERVICE UNDER 37 CFR 1.10 ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE COMMISSIONER OF PATENTS AND TRADEMARKS, WASHINGTON, D.C. 20231.



Curtis L. Harrington

APPENDIX OF CLAIMS ON APPEAL

1. a cord and louver assembly comprising:

a pair of ladder cords, including a first and a second ladder cord each ladder cord having a first and a second vertical cord portion each having a first and second end, said ladder cord including a plurality of spaced apart horizontal cord portions each having a first end connected to said first vertical cord portion and a second end connected to said second vertical cord portion, adjacent horizontal cord portions forming, with said first and second cord portion of each of said first and second ladder cords, a ladder opening;

a plurality of louvers, each louver within a ladder opening of each of said pair of ladder cords, each of said plurality of louvers having a first and a second elevation cord opening;

a base louver having a first and a second bore, each of said first and said second bores for accommodating an end plug;

a first end plug having an aperture, for fitting within said first bore of said base louver;

a second end plug having an aperture, for fitting within said second bore of said base louver, said second ends of said first and second vertical cord portions of said first and second ladder cords secured by said base louver and said first and said second end plugs, said first ends of said first and said second ladder cords extending beyond a ladder opening occupied by a louver farthest from said base louver by a length greater than required for connection to a channel and component assembly of a horizontal blind set;

a first vertical elevation cord, having a first end and a second end, and extending through each said first elevation cord openings of said plurality of louvers, and said aperture of said first end plug and affixed adjacent said first end of said first vertical elevation cord to secure said first vertical elevation cord first end from pulling free of said first end plug, said second end of said first vertical elevation cord extending beyond a first ladder opening of said first ladder cord occupied by a louver farthest from said base louver by a length greater than required for connection of said second end of said vertical elevation cord to a channel and component assembly of a horizontal blind set;

a second vertical elevation cord, having a first end and a second end, and extending through each said second elevation cord openings of said plurality of louvers, and said aperture of said second end plug and affixed adjacent said first end of said second vertical elevation cord to secure said second vertical elevation cord first end from pulling free of said second end plug, said second end of said second vertical elevation cord extending beyond a first ladder opening of said second ladder cord occupied by a louver farthest from said base louver by a length greater than required for connection of said second end of said vertical elevation cord to a channel and component assembly of a horizontal blind set, said first and said second end plugs

also for securing said first ends of said first and said second ladder cords.

2. The cord and louver assembly as recited in claim 1 and wherein said first and said second vertical elevation cords are bundled together adjacent their respective first ends of their said first and second vertical cord portions to secure said cord and louver assembly as a unit.

3. The cord and louver assembly as recited in claim 1 and wherein said ladder cords are bundled together adjacent their respective second ends to secure said cord and louver assembly as a unit.

4. The cord and louver assembly as recited in claim 1 and further comprising a channel and component assembly to which said cord and louver assembly is attached to form a horizontal blind set.

5. a process of forming a horizontal blind set comprising the steps of:

in a cord and louver assembly having:

a pair of ladder cords, each ladder cord having a first and a second vertical cord portion each having a first and second end, said ladder cord including a plurality of spaced apart horizontal cord portions each having a first end connected to said first vertical cord portion and a second end connected to said second vertical cord portion, adjacent horizontal cord portions forming, with said first and second cord portion, a ladder opening;

a plurality of louvers, each louver within a ladder opening of each of said pair of ladder cords, each of said plurality of louvers having a first and a second elevation cord opening;

a base louver having a first and a second bore, each of said first and said second bores for accommodating an end plug;

a first end plug having an aperture, for fitting within said bore of said base louver;

a second end plug having an aperture, for fitting within said second bore of said base louver;

a first vertical elevation cord, having a first end and a second end, and extending through each said first elevation cord openings of said plurality of louvers, and said aperture of said first end plug and affixed adjacent said first end of said first vertical elevation cord to secure said first vertical elevation cord first end from pulling free of said first end plug;

a second vertical elevation cord, having a first end and a second end, and extending through each said second elevation cord openings of said plurality of louvers, and said aperture of said second end plug and affixed adjacent said first end of said second vertical elevation cord to

secure said second vertical elevation cord first end from pulling free of said second end plug, said first and said second end plugs also for securing said first ends of said first and said second ladder cords;

extending said second ends of said first and said second vertical elevation cords through respective first and second small apertures in the base of a channel and component assembly for exiting said channel and component assembly at a location to enable users to pull said first and said second vertical elevation cords to raise and lower said base louver;

extending said second ends of said first and a second vertical cord portions of said a pair of ladder cords through respective openings in said channel and component assembly;

attaching said second ends of said first and a second vertical cord portions of said a pair of ladder cords each to a respective rotation member of said channel and component assembly, to form said horizontal blind set.

6. The process of forming a horizontal blind set as recited in claim 5 and further comprising the step of at least one of removing and adding a louver to and from, respectively said opening of each of said pair of ladder cords, to thereby perform the action of at least one of adding to and subtracting from the number of said plurality louvers to provide a more custom height adjustment.

7. The process of forming a horizontal blind set as recited in claim 5 and further comprising the step of unbundling said first and said second vertical elevation cords adjacent their respective second ends to disassemble said cord and louver assembly from its unitary status.

8. The process of forming a horizontal blind set as recited in claim 5 and further comprising the step of unbundling said ladder cords adjacent the respective second ends of their first and a second vertical cord portions to disassemble said cord and louver assembly from its unitary status.